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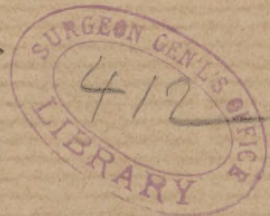
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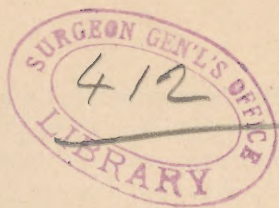
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CRIMINAL ANTHROPOLOGY.

Hawthorne caused Septimus Felton to exclaim : " How idle to suppose that one little lifetime could exhaust the world." It is equally an act of assumption to attempt to treat exhaustively in a single evening so comprehensive a subject as Criminal Anthropology, a thorough consideration of which involves studies in zoology, human and comparative anatomy, physiology, normal and morbid, or pathological psychology ; likewise a review of the social customs of man from the earliest historic period down to the present time.

At present crime may be said to be— " An act or commission which the law punishes in the name and on behalf of the state, whether because expressly forbidden by statute or because so injurious to the public as to require punishment on grounds of public policy." The criminal is— " A person who has committed a punishable offense against public law ; more particularly, a person convicted of a punishable public offense on proof or confession." And the criminologist is— " One who studies crimes with reference to their origin, propagation, prevention, punishments, etc."

Of criminologists, there are, generally speaking, two schools, the theological or spiritualistic and the material or anthropological. These differ in their conception of the causes that found expression in crime, and in many particulars as to the methods to be pursued in the treatment of the criminal. It is foreign to the purpose of this paper to differentiate further between them.

The composition of crime and the conception of a criminal have changed from time to time in the history of man in accordance with the conditions and circumstances under which he lived. Acts that to-day are termed criminal were not so regarded by savages and primitive nations. Certain savages put to death the aged and infirm when they could no longer contribute to their own support. And

travelers bear witness to the fact that custom operates to such a degree upon the mind that those thus designated to die witness the preparations made for their destruction with composure and even ecstasy. The Spartans put away to perish by exposure and neglect the new born who were weakly and deformed that only those who were well formed and active might be preserved to the nation.

There are sometimes seen in domesticated animals and those gregarious in habit, though wild and untamed, acts that are the analogues of human criminality and indicative of a disposition to break away from and destroy the restraints of society, tribal or communal life. Among elephants the "rogue" is driven by his fellows from the herd for his violence and misdeeds and compelled to live apart. As the result of this ostracism and solitary life the viciousness that exiled him from the society of those of his kind develops into revenge and he lies in wait to injure those of his former companions who stray or lag, or he runs amuck through plantations destroying what comes in his way and terrifying the natives. Contests for supremacy and leadership have been witnessed in herds of wild horses and cattle between recognized leaders and rebels. Among these same animals in domestication there are frequently encountered those who are rebellious to discipline, treacherous, and disposed to inflict violence either upon man or their kind. A disposition to destroy their young has been observed in nymphomaniacal mares and cows and the bull-cow is a morbid creature. It has been argued that these bad instincts are due to cerebral change either congenital or acquired. With age dogs become irritable and morose and disposed to turn upon and tear whoever and whatever crosses their path.

Lombroso observes that many and various facts like the above noted in the lower animals indicate a continuous and insensible passage between the acts of animals, which in the case of man only, are considered crimes. The forms of crime in man and animals present a parallelism: there is premeditation with ambush, as with dogs and monkeys; recidivism, as in theft in the case of bees; and crime through anger, ambition, antipathy, vengeance, sexuality, alcoholism, and heredity. In certain instances among animals crime and insanity have been noted to be inextricably associated. He

further notes that the human species exceeds all others in criminality. It kills not only its own kind, but those of all other species, either for profit or pleasure, with impunity. What is not profitable to kill it subjects to slavery. The egoism of the human species surpasses that of all others. The basis of this egoism is a combination of psychic and physical force.

As a social science study, criminality may be said to be a disorder of the adjustment of self to society, its usages and requirements which to the major portion of the civilized world have become instinctive traits through observance covering centuries.

The predisposing factors in criminality are of cosmic, social and biological origin. The two latter, severally or in combination, may be found in society and the individual. Thus social crises may occur that by their effect upon men and callings may, for the time being, call out in individuals and classes anti-social sentiments inciting to violence to person and destruction of property. Hereditary influences, the susceptibility to impressions stimulated by faulty environment, the establishment of morbid psychical states through disease, privation, or other causes that induce physical deterioration and diminished inhibitory power, certain impulses and feelings that in themselves are physiological, but exaggerated, produce psycho-pathological states, may be cited as factors influencing the individual.

A writer has recently said : "Criminality, therefore, cannot be attributed indiscriminately to the lowest of races. It consists in a failure to live up to the standard recognized as binding by the community. The criminal is an individual whose organization makes it difficult or impossible to live in accordance with this standard, and easy to risk the penalties of acting anti-socially. By some accident of development, by some defect of heredity, or birth or training, he belongs as it were to a lower and older social state than that in which he is actually living. It thus happens that our own criminals frequently resemble in physical and psychical characters the normal individuals of a lower race. This is the 'atavism' which has been so frequently observed in criminals and so much discussed." [Ellis.]

There is a criminal element, but it does not appear that there is

distinctively a criminal class. The criminal element is composed of those who have entered upon a life of criminality either primarily through instinct, or secondarily as the result of morbid psychical changes or habits born of circumstances and association. There is no criminal class inasmuch as the ranks of criminality are recruited from "all sorts and conditions of men," from all phases of society. Lacassague observed : "The social environment is the cultivation medium of criminality ; the criminal is the microbe, an element which only becomes important when it finds the medium which causes it to ferment ; every society has the criminals it deserves."

There are several varieties of criminals. The classification mentioned by Ellis in his book, "The Criminal," substantially corresponds with that of Ferri and Colajanni. Five varieties are named, viz : 1, the political criminal ; 2, the criminal by passion ; 3, the instinctive ; 4, the occasional ; 5, the habitual or professional.

It is doubtful if the political criminal should be included in the criminological category. He may be compared to the political partisan and dissident and the religious enthusiast and fanatic. He is not necessarily anti-social ; but in his enthusiasm and zeal to overcome existing conditions or bring those opposing him in belief to his manner of thinking, peaceable means failing of accomplishment, as exhortation and warning, he resorts to coercion and violence.

The criminal by passion, smarting under some real or fancied injury or seeking to inflict punishment for wrong done to wife or daughter, assumes the offices of an avenger and visits with violence the doer of wrong to himself and family. He cannot be said to possess criminal instincts ; but under the stimulus of anger or excitement his powers of self-control and resistance are overcome.

The instinctive criminal, or as Lombroso and other writers prefer to call him, the born or congenital criminal, is a social parasite. It is not always possible to estimate the congenital element, but the conclusion is irresistible that he is organically morbid. His pathology may not be microscopic and the degeneration that consigned him to a low plane of humanity, if revealed at all, will only be revealed under the searching eye of the microscope. The sensual impulse and those centering about self are hyper-developed. For

the gratification of his exaggerated impulses he will proceed to any extreme ; and life and property separating him from the accomplishment of his wishes and desires are but barriers to be overcome. Judging from the sex of his victims, their social status which rendered it easy to entice them after dark into lonely and unfrequented places, and the constant and peculiar mutilation of the bodies, it would appear that the principal in the Whitechapel tragedies was a pathological sexual who resorted to crime in order to gratify his morbid and perverse sexual desires.

The occasional criminal is largely a negative creature who yields himself when temptation and the stimulus of opportunity exceed his resistive power. Save for his weakness and lack of resistive power he would pass muster as no unusual personage. He is neither the victim of self-exaltation nor exaggerated instincts. Physical necessities may operate in the production of an occasional criminal, and a common jail or place of detention, by the facilities it offers through association with thieves and outcasts for instruction in the theory and practice of criminality, may transform the occasional into the habitual criminal. The change from occasional to habitual criminality may be a slow and imperceptible process. The subject may not be conscious of the transition or the establishment of a criminal habitude.

The habitual and professional criminal represent degree rather than kind. The former is inferior to the latter mentally, in culture, and knowledge of social forms, and usually follows some trade or calling to mask his criminality. The latter takes up criminality as a business. It is to him a profession, a fine art, and susceptible of division into specialties. He is a student of men and acquainted with the ways of the world, polished in manners, and often æsthetic in tastes. If the risks are great from a business point of view, and comparable with failures in the mercantile world, the profits are proportionately large.

Not included in the classification given is the insane criminal. His delusions and hallucinations that to him are realities, stern and resistless, may impel to the commission of crime. He may be in a state of mental alienation but considered harmless until, as the result of a concealed and unsuspected delusion, his resistive power

yields before the fancies and impulses of his morbid mind and he lays violent hands upon those about him or commits a crime that is revolting in all its details. For obvious reasons the insane criminal occupies a place peculiarly his own and should be described by the alienist rather than the criminologist.

Of the varieties named, the political criminal and the criminal by passion may be regarded as impromptu criminals. They differ immaterially from their fellow-men and having paid the penalty imposed by society for their offense resume their places in the world and are heard of no more criminally. The instinctive, occasional, and habitual or professional criminal is a recidivist, and as such, presents peculiarities of body and mind that are worthy of consideration.

In order to compare scientifically and truthfully the corporal differences existing between the criminal man and his antithesis, the man who is in harmonious adjustment with society, it is necessary that complete and exhaustive measurements of the two be taken, and the anthropometric studies thus obtained compared in all their details. Upon such an occasion as the present, tabulated statistics while valuable, would prove wearisome, and besides, they would need to be so voluminous that time would be wanting to give them the consideration their importance demands. With this mention of the value of anthropometry in criminological studies I will briefly call attention to some of the more prominent physical appearances of the criminal man. To many their recital will be as familiar as an oft repeated tale; while to others, interested in criminology from the standpoint of social science, it may be the means of directing attention to a more critical consideration of criminal anthropology, a most suggestive study.

The average heads of criminals and those of ordinary people probably do not vary much in size. Among the former small, and large heads are more common and heads of medium size do not appear with a frequency that entitles them to be considered common in the criminal. Thieves generally have small heads and large ones are usually found in murderers. The question of a criminal brain is at present under discussion and cerebral anatomists are giving the subject their attention. The positive utterances of Benedikt

and the conservatism of Professor Wilder obtain among men of equal intelligence and acuteness of observation. There is involved in the problem more than the mere size of the brain, the arrangement of its fissures and gyres ; quality of tissue, vascular supply, and evidence of disease, congenital or acquired, must be studied. A large brain does not necessarily indicate great intelligence any more than a small one mental deficiencies. This being true, as little importance can be attached to the weight of brains of criminals as to the encephalon weights of men of genius, scholars, and statesmen. • The weight of Oliver Cromwell's brain was 82.29 oz. ; Lord Byron's, 79 oz. ; Cuviers, 64 oz. ; Ruloff's, a thief and murderer, 59 oz. ; adult idiot's, 54.95 oz. ; Daniel Webster's, 53.50 oz. ; and Gambetta's that of the size of a microcephalic idiot.

Cranial asymmetry is noticeable in criminals. This is a peculiarity of criminals only in degree and not of kind. Impressions taken of the heads of ordinary individuals by means of a hatter's conformiter show in nearly every instance asymmetries ; but in the case of criminals they are more prominent. The shaven heads of the latter emphasize them.

The ears are voluminous longitudinally and transversely, and a projecting ear standing out boldly is commonly seen. Small ears are met with but large ones are more common. The eyes call for no special mention but to note that the yellow or old gold irides I have seen were in crafty subjects, snake-like and full of finesse. The yellow eye is not common:

Many writers speak of the pallor of the skin. While this is observable I am inclined to attribute it rather to the conditions under which the observations were made, the indoor life incident to prison sojourn, rather than to an inherent cause. A pallor of the skin as marked is to be seen in city hotel waiters who are indoors most of the time and in dining rooms artificially lighted.

Another feature of prison life is its inhibitory action upon the heart due to a discontinuance of the use of tobacco and alcoholics and the substitution of a methodical and rhythmical manner of living, plain and unstimulating food, for insufficient and improper food, late hours, sexual excesses with associated dissipations. Among male criminals ranging from 16 to 30 years of age the heart-beat is

from 50 to 60. It usually requires a fortnight or six weeks to effect the reduction.

I cannot see that hair of any particular color prevails or blondes are more common than brunettes or brunettes than blondes. Some writers have commented upon complexion traits. Facts like these may be noted as racial peculiarities and in countries where the prison population is more homogeneous than in the United States where the ranks of criminality are recruited from nearly every tribe and nation beneath the sun.

I have repeatedly noticed at the period of adolescence large and prominent nipples surrounded by areolæ that were pigmented beyond what is usually seen in the male. Mammary glands as large as a hickory nut, generally lateral, occasionally bilateral, have been observed. In some subjects there was a periodicity of turgescence of this rudimentary organ accompanied by the secretion of an opaque fluid, and a sensation of fullness and weight referred to the region the nipple. It was the subject's complaint of the latter symptom, that first called my attention to this phenomenon. The genitals of this class are developed to a degree not altogether warranted by their years but yet in accordance with the physiological law that use is a factor in structural amplification. The sexual sense of the youthful male criminal is usually intense and previous to apprehension was gratified physiologically unless it was perverse or exaggerated, in which case, onanism or pederasty were resorted to. Prison life does not repress this sense but may act to develop perverted sexual habits. A study of the relation sexual sense bears to crime will show psychical conditions as difficult to control and nullify as the craving for excitement and intoxicants.

Tattooing is more or less common and confined more especially to low grade criminals. The habitual or professional appreciates the fact that being a means of identification it is better to forego such adornment. Boys at first in a spirit of emulation, to exhibit their capacity of endurance to pain, tattoo themselves; and later when they fall into criminal ways, their cutaneous embellishment serves as a card of introduction and bears witness to a knowledge of criminality. The anterior aspect of the forearm is most commonly selected. The arm, wrist, and leg are not spared; and in pronounced

cases designs may be found over the entire body. Among the designs may be mentioned the initials, religious symbols, emblems of love, as a heart transfixed by an arrow, a female face, a star and anchor, obscene legends, animals and birds of various kinds. Young boys are frequently seen with a circular spot on the web between the thumb and forefinger from $\frac{1}{4}$ to $\frac{1}{2}$ inch in diameter. What signification this has if any I have never been able to ascertain. The causes that lead to tattooing are many and various.

It is stated that left-handedness is more common in the criminal than the non-criminal. Among ninety boys, all thieves, recently selected for another purpose, I found 14 or 15% were left-handed and two ambidexterous. My acquaintance with normal individuals yields no such percentage of left-handedness.

The exaggeration of minor aches and ailments is limited only by the subject's imagination and his power of description. A desire to deceive, or a wish to magnify in morbid lines with a hope of the ultimate administration of stimulating remedies, as quinine, opium, etc., can be traced in the stories of the walking invalid. There seems to be in the composition of the nervous system an absence of that which predisposes to shock in accidents involving injury to, or destruction of parts. A hand detached at the wrist, with a tearing of many of the muscles of the forearm from their attachment, by a centrifugal clothes wringer, produced absolutely no depressing symptoms and only by the exercise of authority was the patient kept in his bed. A blow upon the head with a hammer fracturing the skull and forcing a fragment of bone $\frac{3}{4}$ by $1\frac{1}{4}$ inches against the *dura mater* produced unconsciousness that lasted not to exceed five minutes. Following the prompt removal of depressed bone there was uninterrupted progress toward recovery.

In "Leaves from a Prison Diary," Michael Davitt says: "I have met very few individuals in prisons who gave evidence in appearance or talk of being truly miserable, no matter what the length of their sentence, amount of extra punishment, or contrast between their previous and their convict life." Homesickness is seldom seen in prisons. The criminal by passion and circumstance may be depressed, but rarely is the occasional and instinctive

criminal, the recidivist affected. In a service covering the admission of over 3000 criminals the cases of nostalgia have been so few and of such a mild type that I am unable to recall more than half a dozen. The outside world with its habits and associations is left behind and the routine of prison life entered upon without any manifestation of emotion or sacrifice of sleep. The appetite remains good and the club habitue and lodging-house boy with equal facility adapt themselves to ration pans and tin cups. This power of immediate adaptability to new surroundings and the absence of longings for old is in marked contrast to the attacks of homesickness noted in boarding schools among the new boys at the beginning of the term when the subject is so profoundly impressed as to eat and sleep poorly ; he emaciates and for a time is in a state of melancholia. Baron Larrey wrote of the depressing effects of homesickness upon the army of Napoleon in Egypt.

Remorse is more common in fiction than amid the realities of a prison. There is a state of moral obtuseness that fails to take cognizance of criminality as other than a business or a means of getting a living ; or it is justified upon the ground that it is an agent for procuring means for the gratification of sensuous desires which are regarded as necessities. The disgrace is in the fact that the mode of procedure and execution were such as to lead to detection. There is a suspension or dwarfing of moral or ethical instincts and an exaggeration of all that pertains to self, of morbid traits and tendencies of mind and morals. A man once said to me : "I am no common thief. I had access to my employer's safe and cash and never took a penny. I only took goods from his stock and this did not cripple him." In speaking of his criminological studies Despine says : "I acquired the certainty that those who premeditate and commit crime in cold blood never experience moral remorse. I found also that those who manifest acute sorrow and real remorse after a criminal act have committed that act either under the influence of a violent passion, which has momentarily stifled the moral sense, or by accident without intention."

The quality of truth is strained ; it is even more than this, it is greatly diluted. Untruthfulness is a concomitant of criminality, and the natural liar, the liar by instinct, needs only to be mentioned. Every prison official is acquainted with him.

It would require a volume to tell of the workings of the criminal mind ; of the cunning that has been denominated intelligence, and the development of intellection in certain lines to the point of prominence and exaggeration, compensatory it would appear, to deficiencies as pronounced ; of the dislike for steady and continuous labor and the inaptitude for prolonged mental exertion.

From the foregoing I have omitted physiognomy. A face may either attract or repel, its lines indicate firmness and decision or weakness and sensuousness. In physiognomy may be traced refinement or brutality, surfeit or privation, gentleness or irascibility, together with other traits; yet, from a consideration of the face, it is assuming too much to predicate the form of criminal tendencies if any, of the subject. Criminal physiognomy is not yet an exact science and we are not in position to affirm that crime may be read upon the face.

It cannot be affirmed that the corporal and psychical peculiarities noted in a prison population only accompany criminality, that they are never found in individuals who pass as normal in the community in which they live : but judging by the frequency with which they are presented by those recognized as criminal and inmates of prisons, and their comparative absence in those who are known to be free from criminal tendencies, the inference is, I say inference advisedly, because in the present state of our knowledge we cannot affirm through data gained at the post mortem table, that they are due to subjective causes that operate in the individual to produce a criminological diathesis. The practical criminologist regards criminality as bred in the bone and born in the flesh and the etiology of crime to be looked for chiefly in heredity and environment, using the word environment in its most liberal sense, ante and post natal, and whatever cause, in whatever way, that exerts a deleterious influence upon nutrition and the functions of organic life, voluntary and involuntary.

Punishment exerting no deterrent influence, and the criminal possessing peculiarities of body and anomalies of mind, raises the question : Is not criminality the manifestation of a morbid psychical or pathological state due to want of development or retrograde changes of motor and sensory areas of the central nervous system?

"In the criminal there is an incapacity to feel, or to act in accordance with the normal conditions of social life." As for myself, as I study the delinquent physically and note his crude or exaggerated mental processes that lack the rotundity of a well-balanced mind the wonder is not why are not more adjusted to society, but that the number of those impressed for the better is as great as it is.

The time was when the insane were regarded as witches and burned at the stake or tortured to compel the confession of the possession of a devil, and inebriety was looked upon as altogether volitional. Now insanity and inebriety as diseases are classed among the psychoses and regarded as the manifestations of a defective organization. Criminality as a collateral degeneracy should be included in the same category.

The law takes cognizance of the offence rather than the criminal, and, though it disclaims the retributive idea it does so in theory rather than in practice. Lombroso says that there is an impatient opposition against the idea of regarding the criminal as a patient, a feeling which is latent in each one of us. We desire vengeance although we may have changed its name and appearance. The sentimentalist likewise is opposed to a consideration of the criminal as morbid. He ignores in criminality a personal equation.

There are criminals and criminals. Some are both good and bad in varying degrees, and, as influenced by their surroundings, so conduct themselves: in others the bad is in the ascendancy minimizing the good: and again, the evil predominating in every line and act, the good is an unknown quantity. As a desperate illness after repeated relapses may terminate in recovery, so one of the latter class may finally reach a state of moral alignment. He is a skilled diagnostician in moral disease who can draw a sharply defined line of demarkation between corrigibility and incorrigibility. The earlier treatment is instituted the better the prognosis for at the plastic age it is possible to develop the latent good and neutralize the asserting bad by the establishment of a correct habitude of body and mind. Deferred until the practices of years have wrought an evil habitude of mind the work of ethical reconstruction is attended with difficulties and disappointments.

Little is being done in this country in criminal anthropology that can compare with the studies and researches that are being carried on in Italy, France and Germany. The student unacquainted with the languages of these countries pursues his studies at a disadvantage owing to the paucity of literature in English upon the subject. Beyond resumes and brief reviews there are no translations.

In the *American Journal of Psychology*, January, 1890, Mr. Arthur MacDonald of Clark University says: "Criminal anthropology is one of the most recent sciences. At first the scientific study of criminology was looked upon with suspicion. At present interest in the subject is greatly increasing. Like every new science, it is in its polemical stage. The Italians are the innovators. The criminologists are divided into two parties: one emphasizes the pathological or atavistic causes; the other, the psychological and sociological."

Lombroso's "*L'Uomo Delinquente*" by reason of its minuteness of detail and wealth of documentary evidence is a matchless work in the field of criminological literature. Though many differ from the author, and his conclusions have been sharply criticized the work stands first of its kind for anthropological data. Lombroso, Ferri and Garofalo are the most prominent exponents of the Italian school. They contend that the dangerousness of the criminal shall determine the measure of punishableness. Penal repression should be based upon social utility, scientifically demonstrated. Instead of studying law texts, there is need to study the criminal, and the laws should be changed so as to be in accordance with criminological facts. Present penological methods neither cure nor terrify the criminal; and the idea of the moral responsibility of the individual should not be considered. It is the duty of society to eliminate those who are utterly unadapted to society. Punishment is not to punish the criminal, but to eliminate him absolutely or partially. Recidivation of the criminal is the rule, reformation the exception. The criminal is a being at present unadapted to surrounding circumstances: he is a monster, and presents traits of the past racial regression. All criminals are born, but predisposition does not exclude the influence of surroundings. Such in brief are a few

of the views held by those who believe in the atavistic or reversion theory.

As opposed to the Italian school, Dr. A. Krause states that the love of pleasure, and aversion to labor are by far the greatest sources of crime. An irresistible force, outside of pathological conditions, is not recognized by an earnest administration of justice. Strictness in treatment is more rational than mildness. Dr. v. Holder observes that it is impossible from cranial asymmetries to conclude as to psychical characteristics. Physical signs of degeneration indicate nothing further than the presence of a tendency to psychical degeneration. In the physiognomy of the criminal one will see the features of the insane. There are two classes of criminals: 1. Criminals by occasion; 2. Recidivists. The basis of all criminality is irradicable tendency to lying. Men furnish almost six times as many criminals as women. It is easier for men to outstep the bounds of morality and custom. Most women criminals lose every trace of womanhood in demeanor. From an examination of 19 criminals' brains, Dr. Moritz Benedikt notes a defective development of fissures found throughout the entire brain. A priori, this would be expected, because otherwise the tendency to defective acts would have been compensated for by other parts of the brain. "That an atypical and defective brain can function normally, is out of the question. What we do not know is, why such a brain functions this way and not that; and why, under certain psychological conditions, it functions just in this way." From a detailed examination of 19 criminals' brains, two things are established: 1. A type of the confluence of fissures; 2. That these 19 brains belong to this type. At the close of his book Dr. Benedikt says: "The plan pursued has been the most injudicious possible. Crime is a psychological act of the criminal, and the criminal, therefore is the first object for study. In order to acquire and spread abroad sensible views, and before all, that it may be clearly ascertained whether and how criminals can be corrected, and how society can best be protected from the scourge of crime, it will be necessary for scientific criminalists to adopt the methods of naturalists. It will be especially requisite to have institutions for purposes of observation and teaching, and these

must be established in capital cities where prisons and the higher executive departments of justice are located, and above all they should be confided to educated and scientific investigators." The claim of Benedikt that fissural confluence is characteristic of the criminal brain has been disputed and denied by anatomists.

The cerebral anatomists of this country who are qualified to speak by their examinations of criminal brains express themselves reservedly.

Professor Burt G. Wilder in Wood's "Handbook of the Medical Sciences" says: "The fissures of idiots, of insane persons, and of criminals are usually peculiar; whether these peculiarities have the significance sometimes ascribed to them, and especially whether murderers' brains present characteristic features, are questions of exceeding interest and importance. The writer does not feel ready, as yet, to discuss them."

In reply to the question, "Whether, as the result of autopsies and microscopical investigations, a conclusion has been reached that there was cerebral degeneration or a return to primitive types that would be sufficient to account for moral delinquencies?" Dr. Charles K. Mills, of Philadelphia, says; "Of the various attempts to classify criminals, more or less elaborate, one of the best, that of Tyndall, arranges them into: 1. Criminals of occasion [accident], but essentially of sound morals; 2. Criminals of the plastic type, that is, who can be readily moulded for either good or evil; 3. Incurable criminals. The examination and comparison of skulls and of brains indicates that criminals of the third, and a large number of the second class, are so because either of their deformed inheritance or because of acquired disease, in other words, because of arrest of development, a return to primitive types or degeneration. The number of brains and skulls examined for gross appearances, and in particular the microscopical investigations so far made, of "criminal brains," are not yet sufficient to support with elaborate details this position, but they are certainly sufficient to point to the above as a sound conclusion." In a monograph entitled "Arrested and Aberrant Development of Fissures and Gyres in the Brains of Paranoiacs, Criminals, Idiots, and Negroes," Dr. Mills says: "As shown by Turner, we must study the depths of fissures, the thickness of gray

matter, the quality of tissues. The microscope must lend its help. It would be a most interesting, valuable, and thoroughly scientific investigation to take a human brain of the kind exhibited, and with it make an elaborate, painstaking investigation from every point of view. Such careful and elaborate work, although it required weeks, or months, or years for its thorough accomplishment, would be of inestimable value to anthropology and medicine, and would reward with abundant laurels the patient and careful investigator."

In the "*American Journal of Neurology and Psychiatry*," vols. II, and III., p. 135, Dr. J. S. Wight says: "The concurrent and unanimous testimony of those who are, from their experience and knowledge, most competent to judge, is: That the great under class of criminals have more or less defective organizations, especially as relates to their nervous system, and more especially to their brain; that they are more or less deficient in moral sense, showing in this respect the lack of development or the result of decay, the best and last developed sense, the moral sense, disintegrating first of all; that they are perversely wicked and indomitably inexpedient, committing crimes when doing right would be of more use to them; that they are as passionate as the wild beasts of the forests, and as restless as the ocean that heaves at every gust of the wind; that they are at war with mankind and ever in commotion with themselves; that they are, like the ship, beaten about by the storm—the ship without compass, rudder, or captain; that they are formed and fashioned by the hand of an evil genius, whose name is bad heredity, and whose hand-maid is ignorance; and that they cannot be very much reformed, and that their reformation ought to have been begun in their ancestors."

Upon an occasion such as the present, in a single paper, it is a work of supererogation to essay to treat in other than a desultory way the subject assigned me. My purpose will have been accomplished if this paper shall have emphasized to those interested practically and theoretically in prison work the importance of criminal anthropology.

